

Potatoes

North Dakota and Minnesota

DuPont™ Matrix®

herbicide

Excellent pre or post emerge weed control and crop tolerance

At last ... season-long weed control in potatoes is possible. Whether you're growing red, russet or white potatoes, you'll see improved control and reduced crop stress when you include DuPont™ Matrix® herbicide in your weed control program.

The benefits of a Matrix® weed control program:

■ Broad-spectrum performance on tough weeds

Matrix® controls tough weeds like redroot pigweed, foxtail, volunteer grain, quackgrass, wild mustard, kochia and many others. And Matrix® provides partial control of wild oat and hairy nightshade.

■ Excellent potato tolerance

Matrix® can be used with confidence on just about all potato varieties commonly grown in the Northern Midwest.

■ Application flexibility

Matrix® can be applied pre or post emerge to weeds and potato plants by ground or air. For best results, follow a basic preemergence treatment with a planned post application of Matrix®.

■ Reduced cultivation losses

A Matrix® herbicide program delivers better, more consistent weed control vs. cultivation only. By saving one or more mid-season cultivations, you will reduce root pruning stress and unnecessary moisture loss.

■ Cleaner harvest

Improved in-row weed control adds up to fewer harvest problems and improvements in yield and tuber quality.

■ Crop rotation options

Matrix® degrades quickly in the soil, allowing for flexibility in crop rotation options, including cereals and dry beans. See the Matrix® product label for specific crop rotation intervals. When tank mixing other products with Matrix®, follow the most restrictive herbicide label regarding crop rotation options.

■ User-friendly

With low use rates of only 1.0-1.5 ounces per acre, the small 15-ounce container treats 10-15 acres. And, the dry-flowable formulation means there is no offensive odor or staining.

■ Good stewardship

Matrix® works on a plant enzyme not found in fish, wildlife or humans. Once applied, it is unlikely to move into surface water or groundwater because of its rapid breakdown and soil-binding characteristics. Matrix® applications do not result in any detectable residues in the tuber.

Split applications

During periods of unfavorable weather or when the top growth of your potatoes is thin, multiple flushes of problem weeds can be



expected. In these circumstances, a second application of Matrix® — 14 to 28 days after the first — may be necessary for maximum control. Do not exceed 2.5 ounces of Matrix® per acre per season.

Cultivation

A timely cultivation may be necessary to control suppressed weeds, weeds that were beyond the maximum size at application, or weeds that emerge after Matrix® was applied.

■ Optimum timing for cultivation is 7-14 days after a postemergence application of Matrix®.

■ Cultivation up to 7 days before the postemergence application may decrease weed control by pruning weed roots, placing the weeds under stress, or covering the weeds with soil and preventing coverage by Matrix®.



DuPont™ Matrix® use recommendations for effective, broad-spectrum control of broadleaf and grassy weeds in potatoes

	POSTEMERGENCE ON DRY LAND OR IRRIGATED FIELDS	PREEMERGENCE ON IRRIGATED FIELDS
Use rates	1.0 oz Matrix® per acre	1.5 oz Matrix® per acre
Timing	<p>Apply Matrix® to young, actively growing weeds; small weeds (less than 1" in height or diameter) are most easily controlled.</p> <p>For suppression/partial control of:</p> <ul style="list-style-type: none"> • Quackgrass: apply when quackgrass is 4"-8" tall. • Canada thistle: apply to small actively growing plants. 	<p>Apply Matrix® after hilling or drag-off, prior to emergence of crop and weeds, to a clean, newly prepared seedbed. Matrix® should be activated within one week by 0.5"-1.0" irrigation or rainfall (highest amounts for heavy soil, lowest for sandy soil).</p>
Spray adjuvants	<p>Use a non-ionic surfactant at 0.125 to 0.25% v/v (1 to 2 pt/100 gal of water). The 0.25% v/v rate is preferred under arid or drought conditions.</p> <p>Use a petroleum (crop oil concentrate) or methylated seed oil based crop oil concentrate at 1% v/v (1gal/100 gal spray solution).</p>	<p>If a clean, newly prepared seedbed, free of emerged or germinating weeds does not occur, and weeds are present at application, add a non-ionic surfactant containing at least 80% active ingredient to the spray mix at 0.125 to 0.25% v/v (1 to 2 pt/100 gal of water). Control may not be adequate for weeds that have an established root system before activation of Matrix®.</p>
Tank mixes (Read the companion herbicide label directions. Always follow the most restrictive label.)	<p>Matrix® at 1.0 oz + Sencor herbicide at 0.25-0.5 lb will improve control of Russian thistle, common lambsquarters, hairy nightshade, common ragweed and kochia.</p> <p>See Sencor label for precautions and restrictions on sensitive varieties.</p>	<p>Matrix® may be tank-mixed with Eptam, Prowl, Dual, Sencor and Lorox DF herbicide.</p>
	<p>Matrix® at 1.0 oz + Eptam at labeled rates can be applied before potatoes are 4"-6" tall.</p>	

Application equipment

Apply Matrix® by ground or air with properly calibrated sprayer equipment.

Crop response

If crop response does occur, the symptoms are usually in the form of mild, temporary chlorosis (lighter shade of green) lasting only a few days. Crop yield and grade are not affected.

Label instructions

For best results, always read and follow the Matrix® label and the labels for companion herbicides used. Always follow the most restrictive label for directions and precautions of use when tank mixing other products with Matrix®.

Pay special attention to instructions for sprayer tank clean-out and avoiding spray drift.

For more information

Contact your local DuPont crop protection retailer or DuPont representative for more information about Matrix® herbicide programs. And visit our Web site at matrix.dupont.com.

This reference guide is not intended as a substitute for the product label for the products referenced herein. Product labels for the above products contain important precautions, directions for use and product warranty and liability limitations that must be read before using the product. Applicators must be in possession of the product label(s) at the time of application. Always read and follow all label directions and precautions for use when using any pesticide alone or in tank mix combinations.

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